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In re Application of	:	Toth, Thomas L.
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Group Art No.	:	3737
Examiner	:	Baisakhi Roy

CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10

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APPEAL BRIEF PURSUANT TO 37 C.F.R §1.191 AND §1.192

Dear Sir:

This Appeal Brief is being filed in furtherance of the Notice of Appeal filed on July 19, 2007.

1. **REAL PARTY IN INTEREST**

The real party in interest is General Electric Company by virtue of the Assignment recorded April 20, 2004, at reel 016212, frame 0534.

2. **RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal. General Electric Company, the Assignee of the above-referenced application, as evidenced by the documents mentioned above, will be directly affected by the Board's decision in the pending appeal.

3. **STATUS OF CLAIMS**

Claims 1-27 are currently pending and are currently under final rejection. Claims 1-27 are the subject of this appeal.

4. **STATUS OF AMENDMENTS**

All previous amendments have been entered. Appellant has submitted no additional amendments subsequent to the Final Office Action of October 31, 2006.

5. **SUMMARY OF CLAIMED SUBJECT MATTER**

The invention relates to a "method and apparatus of acquiring imaging data at more than one energy range using multi-energy high speed switching filters (92-96). *Application,* ¶ [0001]. The switching filters (90-96) are part of a filtering apparatus (17) that is positioned on a gantry (12) and, as illustrated in Figures 1 and 2, "the filtering apparatus 17 is shown as a pre-patient filter, as will be described more fully with respect to Figs. 6-8." *Id.,* ¶ [0026]. Referring to Figure 6, "a four-spoked filtering apparatus 17 is shown." *Id.,* ¶ [0034]. "Filtering apparatus 17 includes a hub 86 having a number of connection ports 88." *Id.* "Connected to hub 86 at each connection port 88 is a filter 90." *Id.* The apparatus (17) may also include filtering members (92-96) "snap-fit, bolted, or integrated with hub 86." *Id.* Hub (86) includes circuitry and a controller (27) "to

position one of the filters 90-96 in a path of high frequency electromagnetic energy." *Id.,* ¶ [0035]. "Hub 86 is thereby caused to rotate filters 90-96 into the high frequency electromagnetic energy path synchronously with energization of the high frequency electromagnetic energy projection source 14 of Fig. 1." *Id.*

Claim 1 calls for a CT system (10) that includes a rotatable gantry (12) having an opening (48) for receiving a subject (22) to be scanned, an HF electromagnetic energy source (14) configured to project a number of HF electromagnetic energy beams (16) toward the subject (22), and a generator configured to energize the HF electromagnetic energy source (14) to at least a first energy state (A) and a second energy state (B), and a hub (86). *Application,* ¶¶ [0026], [0034] - [0036]. The CT system (10) includes a number of HF electromagnetic energy filters (90-96) in a spoked relationship with the hub (86) and positional between the HF electromagnetic energy source (14) and the subject (22). *Id.,* ¶¶ [0035] - [0036]. The number of HF electromagnetic energy filters (90-96) include at least a first filter (90) and a second filter (92) wherein the first filter (90) is positioned between the HF electromagnetic energy source (14) and the subject (22) by rotation of the hub (22) when the HF electromagnetic energy source (14) is energized to the first energy state (A) and the second filter (92) is positioned between the HF electromagnetic energy source (14) and the subject (22) by rotation of the hub (86) when the HF electromagnetic energy source (14) is energized to the second energy state (B). *Id.,* [0036]. Only one of the first filter (90) and the second filter (92) is positioned between the HF electromagnetic energy source (14) and the subject (22) when the HF electromagnetic energy source (14) is energized to either one of the first energy state (A) or the second energy state (B). *Id.,* Figs. 2 and 7.

Another aspect of the invention is set forth in claim 8, which calls for a controller (27) configured to acquire CT imaging data at more than one chromatic energy state, the controller (27) having instructions to energize an HF electromagnetic energy source (14) configured to project an HF electromagnetic energy beam (16) toward a subject (22) to be scanned to a first voltage potential (A), and position only a first portion (90) of a filtering apparatus (17) between the subject (22) and the HF electromagnetic energy source (14) along a path of rotation of a hub (86) of the filtering apparatus (17) in a spoked

relationship with the first portion (90) during energization of the HF electromagnetic energy source (14) to the first voltage potential (A) *Application,* ¶¶ [0026], [0034]-[0036] and Fig. 7. The controller (27) has further instructions to energize the HF electromagnetic energy source (14) to a second voltage potential (B), and position only a second portion (92) of the filtering apparatus (17) between the subject (22) and the HF electromagnetic energy source (14) along the path of rotation of the hub (86) in a spoked relationship with the second portion (92) during energization of the HF electromagnetic energy source (14) to the second voltage potential (B). *Application,* ¶ [0036].

A further aspect of the invention is set forth in claim 16 which calls for a method of acquiring imaging data at more than one chromatic energy comprising the steps of projecting a first beam of electromagnetic energy along a single projection path toward a subject (22) to be scanned, and positioning a first filter (90) in the single projection path during projection of the first beam by rotation of a hub (86) in a spoked relationship with the first filter (90). *Application,* ¶¶ [0026], [0034] - [0036]. The method further includes projecting a second beam of electromagnetic energy along the single projection path toward the subject (22), and positioning a second filter (92) in the single projection path during projection of the second beam by rotation of the hub (86) in a spoked relationship with the second filter (92). *Id.*

Another aspect of the invention is set forth in claim 19 which calls for a computer readable storage medium having a computer program stored thereon and representing a set of instructions that when executed by a computer (36) causes the computer (36) to energize an HF electromagnetic energy source (14) to a first voltage (A) to cause the HF electromagnetic energy source (14) to project a first beam of electromagnetic energy toward a subject to be scanned, and rotate a hub (86) to position a first filter (90), in a spoked relationship with the hub (86), between the HF electromagnetic energy source (14) and the subject (22) during energization of the HF electromagnetic energy source (14) to the first voltage (A). *Application,* ¶¶ [0026], [0034] - [0036]. The computer (36) is further caused to energize the HF electromagnetic energy source (14) to a second voltage (B) to cause the HF electromagnetic energy source (14) to project a second beam of electromagnetic energy toward the subject (22), and rotate the hub (86) to remove the

first filter (90) from being positioned between the HF electromagnetic energy source (14) and the subject (22) and position a second filter (92), in a spoked relationship with the hub (86), between the HF electromagnetic energy source (14) and the subject (22) during energization of the HF electromagnetic energy source (14) to the second voltage (B). *Id.*

Still another aspect of the invention is set forth in claim 24 which calls for a filtering apparatus (17) for a radiation emitting imaging system that includes a hub (86) having a generally circular cross-section and having a number of connection ports (88), and a first filter (90) connected to the hub (86) at a first connection port, the first filter (90) having a first filtering power. *Application,* ¶¶ [0034] - [0036]. The filtering apparatus (17) further includes a second filter (92) connected to the hub (86) at a second connection port, the second filter (92) having a second filtering power, wherein the first and second filters (90, 92) are in a spoked relationship with the hub (86). *Id.*

6. **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1, 8, 16, 19 and 24 are patentable under 35 U.S.C. §102(b) as being anticipated by Gordon et al. (5,661,774).

7. **ARGUMENTS**

The Examiner rejected claims 1, 8, 16, 19 and 24 under 35 U.S.C. §102(b) as being anticipated by Gordon et al. *Office Action,* 04/19/2007, pg. 2. Claim 1 calls for, in part, a CT system having a number of HF electromagnetic energy filters <u>in a spoked relationship</u> with the hub, wherein a first filter is positioned between the HF electromagnetic energy source and the subject by rotation of the hub and a second filter is positioned between the HF electromagnetic energy source and the subject by rotation of the hub. Claim 8 calls for, in part, positioning a first portion of a filtering apparatus <u>in a spoked relationship</u> with a hub, and positioning a second portion of the filtering apparatus <u>in a spoked relationship</u> with the hub. Claim 16 calls for, in part, positioning a first filter by rotation of a hub <u>in a spoked relationship</u> with the first filter, and positioning a second filter by rotation of the hub <u>in a spoked relationship</u> with the second filter. Claim 19 calls for, in part, rotating a hub to position a first filter, <u>in a spoked relationship</u> with the hub,

and rotating the hub to position a second filter, in a spoked relationship with the hub, between the HF electromagnetic energy source and the subject. Claim 24 calls for, in part, a hub, a first filter connected to the hub at a first connection port, and a second filter connected to the hub at a second connection port, wherein the first and second filters are in a spoked relationship with the hub. Thus, rejected claims 1, 8, 16, 19 and 24 all call for a hub and filters in a spoked relationship therewith.

Gordon et al. teaches "an improved power supply that is useful in connection with dual energy X-ray systems." *Gordon et al.,* Col. 1, lns. 13-16. "Filter 262 is a preferably flat disk that is disposed proximal to X-ray tube 128 for rotation within the beam generated by X-ray tube 128." *Id.,* Col. 13, lns. 15-17. Filter 262 is a flat metal disk with six pie shaped segments, with three of the segments 270 formed from relatively thick material, and three segments 272 formed from relatively thin material. *See Id.,* Col. 13, lns. 23-33. "Segments 270 and 272 are alternately disposed so that each of the thick segments 270 is adjacent to two of the thinner segments 272, and vice versa." *See Id.,* Col. 13, lns. 37-39. Filter 262 rotates to dispose segments 270 and 272 alternately in the beam. *See Id.,* Col. 13, lns. 40-44.

The Examiner alleged that the filters as called for in claims 1, 8, 16, 19, and 24 are anticipated by Gordon et al. under §102(b). *Office Action,* 04/19/2007, pg. 2. The Examiner alleged that Gordon et al. "clearly teaches a filter 262, divided into six thin and thick segments alternately disposed on the metal disk." *Id* (emphasis added). The Examiner further alleged that the segments in Gordon et al. are in a spoked relationship with respect to the disk and stated, "[t]he segments themselves are the spokes extending radially from the center of the disk to a rim." *Id* (emphasis added). The Examiner stated that the segments 270, 272 are alternately disposed as the filter rotates between two energy levels "which would clearly demonstrate the spoked relationship of the filter segments with respect to the center of the metal disk. *Id.*

However, the Examiner's logic and interpretation of Gordon et al. is flawed, and Gordon et al. does not teach or suggest "six thin and thick segments alternately disposed **on the metal disk**" as alleged by the Examiner. As will be explained, filter 262 is a flat metal disk, and such is stated explicitly in Gordon et al. at col. 13, line 24. Gordon et al.

leaves no other interpretation for the structure of the filter taught therein. And, although the Examiner is correct in stating that "the segments 270, 272 are alternately disposed as the filter rotates between two energy levels," the alternating thick and thin sections are not "on" the disk, nor are the segments "spokes" as alleged by the Examiner. Instead, the alternating thick and thin sections form the disk. Thus, that called for in claims 1, 8, 16, 19, and 24 is not taught or suggested by Gordon et al.

The Examiner cited a Merriam-Webster Online dictionary in support of a conclusion that a "hub is the 'central part of a circular object (wheel or propeller)' as the metal disk in Gordon et al. et al. and spokes are 'any of the small radiating bars inserted in the hub of a wheel to support the rim' as the segments of the disk in Gordon et al." *Office Action,* 10/31/06, Pg. 2.

However, the disk filters of Gordon et al. are not in a spoked relationship to one another as called for by Appellant. Although Appellant does not accede to the definition cited by the Examiner, the disk filters of Gordon et al. do not even meet a definition of "spokes" <u>according to the Examiner's own definition</u>. That is, Gordon et al. neither teaches nor suggests filters in a spoked relationship with a hub having "radiating bars." As best as can be understood, by the Examiner's definition, the Examiner is calling the flat disk of Gordon et al. a "hub." If the flat disk is the "hub," then how can the segments of the disk be both the hub and the spokes? By the Examiner's definition, the hub should have bars inserted therein to support a rim. There are no "bars" inserted into and extending from the filter disk/hub to support a rim.

Rather, the filters of Gordon et al. are flat segments 270, 272 of filter 262. Perhaps the confusion regarding Gordon et al. arises from the Figures illustrating filter 262, wherein radial lines of delineation segment, or divide, filter 262 into flat segments 270, 272. Although the Figures may be deceiving and the disk of Gordon et al. may have somewhat of an appearance of spokes, the disk segments taught in the specification of Gordon et al. are not "spokes." Filter 262 of Gordon et al. is illustrated in Figures 5, 7, and 9, and the supporting text, beginning at Col. 13, ln. 8 of Gordon et al., presented below <u>in whole with emphasis added</u>, will better elucidate that which is taught by Gordon et al.:

For the preferred dual energy baggage scanner shown in FIGS. 1-3, as seen in FIG. 5, in order to further enhance the disparity between the energy levels of high and low energy beams passing through the baggage being scanned, the waveform generator 186 preferably includes a motor 260 for rotating a filter 262, a rotary shaft encoder 264, and a digital-to-analog converter 268. <u>Filter 262 is a preferably flat disk that is disposed proximal to X-ray tube 128 for rotation within the beam generated by X-ray tube 128</u>. Rotary shaft encoder 264 senses the angular position of filter 262 and generates a digital signal representative thereof, and applies this digital signal to digital-to-analog converter 268. The latter generates an analog signal representative of the digital signal generated by encoder 264 and applies the analog signal to amplifier 230 of power supply 200.

In the illustrated embodiment, <u>filter 262 is a flat metal disk that is divided up into six equally sized "pie shaped" segments</u>, although the number of segments can vary. <u>Three of the segments 270 are formed from relatively thick sheets 128</u> of dense material (e.g., 0.6 mm of copper) that are sufficiently thick so as to absorb a portion of the low energy photons generated by X-ray tube 128 and are sufficiently thin so as to transmit substantially all of the high energy photons generated by tube 128. <u>The three remaining segments 272 are formed from relatively thin sheets</u> of light material (e.g., 0.1 mm of aluminum) and are sufficiently thinner than segments 270 so that segments 272 transmit a higher percentage of the low energy photons generated by tube 128. <u>Segments 270 and 272 are alternately disposed so that each of the thick segments 270 is adjacent two of the thinner segments 272, and vice versa</u>.

In operation, filter 262 rotates under the control of motor 260, and analog-to-digital converter 268 generates a periodically varying analog signal representative of the angular orientation of filter 262, <u>and specifically indicating whether a segment 270 or a segment 272 is disposed in the beam 124</u>. In the illustrated embodiment, converter 268 preferably generates a sinusoidal signal characterized by frequency f_1, where f_1 is equal to three times the rotational frequency of filter 262. As stated above, the rate or frequency f_1 of the signal generated by converter 268 and applied to amplifier 230 controls the periodic rate at which the X-ray beam changes between high and low energy levels. Since the signal generated by converter 268 is synchronized with the rotation of filter 262, waveform generator 186 insures that the periodic rate of change of the X-ray beam between the two energy levels is synchronized with the rotation of filter 262.

In the illustrated embodiment, filter 262 preferably rotates 120° for every oscillation of the X-ray beam, and the initial position of <u>filter 262 is adjusted so that one of the thicker sections 270 is disposed in the beam</u>

> between the tube 128 and the baggage 112 (shown in FIG. 1) when tube 128 generates the high energy beam (i.e., when the voltage level between node A and system ground equals V_1), and one of the thinner sections 272 is disposed in the beam when tube 128 generates the low energy beam (i.e., when the voltage level between node A and system ground equals V_2). So filter 262 removes a portion of the low energy photons from the high energy beam and filter 262 removes few if any of the low energy photons from the low energy beam. So filter 262 acts to increase the disparity between the energy levels of the high and low energy beams generated by tube 128.
>
> In the preferred embodiment, the rotation of filter 262 (and therefore the oscillation of the X-ray beam) is synchronized to the rotation of rotating disk 124 of the baggage scanner (shown in FIGS. 1-3), so that the X-ray beam periodically changes between the high and low energy levels and back to the high energy level (one cycle or period of the waveform) N times for every 360° rotation of disk 124, where N is an integer. In one preferred embodiment N is equal to 600, although this number can clearly vary. It will be appreciated that N low energy projections and N high energy projections will be thereby provided for each 360° rotation of disk 124. *Gordon et al.,* Col. 13, ln. 8 through Col. 14, ln. 16. (emphasis added).

Gordon et al. thus teaches a disk-shaped filter 262 having alternating filter segments 270 and 272. The filter 262 is positioned between the x-ray source and the object to be scanned. The filter rotation is synchronized with rotation of the gantry. As stated, filter 262 is illustrated in Figs. 5, 7, and 9. As such, filter 262 includes alternating flat segments 270, 272 in a disk shape, and filter 262 is rotated such that flat segments 270 and 272 alternate and are disposed between the x-ray source and an object to be scanned.

In the office action dated 04/19/2007, in response to Appellant's arguments, the Examiner stated that "applicant is directed to the individual filter segments, 270 and 272 as the spokes extending from the center of the metal disk 262." *Office Action,* 04/19/2007, pg. 2. The Examiner further stated, "Gordon clearly teaches a filter 262, divided into six thin and six thick segments alternately disposed on the metal disk (col. 13, lines 24-39)." *Id.* However, as explained above, the thin and thick segments are not "on" the disk, but rather they "are" the disk, and the segments are not the spokes. And, as stated, the segments are delineated in Figs. 5, 7, and 9 of Gordon et al. using radial lines

which may take on an appearance of spokes, but the filters of Gordon et al. are **not** the radial lines, but are merely delineated by them as part of the disk 262 illustrated therein.

MPEP §2131 states that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131 further requires that "[t]he identical invention must be shown in as complete detail as is contained in the … claim" and that "[t]he elements must be arranged as required by the claim." Clearly Gordon et al. does not meet this requirement. The filter of Gordon et al. does not have segments in a spoked arrangement, but instead has a series of filter elements that comprise the plane of a disk. Gordon et al. does not teach small radiating bars inserted into the hub of a wheel to support a rim. Rather, Gordon et al. teaches a flat disk filter, and one skilled in the art will recognize that a disk is not identical to a spoked wheel. In fact, the Examiner equated the metal disk of Gordon et al., i.e. filter 262, as the hub of a spoked wheel. With that interpretation, there are no "spokes" extending radially to a rim, and the metal disk is not in a spoked relationship with anything. Thus the elements of claims 1, 8, 16, 19, and 24 are neither expressly nor inherently described by Gordon et al.

8. CONCLUSION

For at least the reasons set forth above, that which is called for in claims 1, 8, 16, 19, and 24 is not taught or suggested by Gordon et al. As such, Appellant believes that claims 1, 8, 16, 19, and 24 and claims which depend therefrom, are patentably distinct over the art of record.

Appellant appreciates the Board's consideration of these Remarks and respectfully requests timely issuance of a Notice of Allowance.

Dated: December 17, 2007
Attorney Docket No.: GEMS8081.102

Respectfully submitted,

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CLAIMS APPENDIX

In the claims

1. (Previously Presented) A CT system comprising:

a rotatable gantry having an opening for receiving a subject to be scanned;

an HF electromagnetic energy source configured to project a number of HF electromagnetic energy beams toward the subject;

a generator configured to energize the HF electromagnetic energy source to at least a first energy state and a second energy state;

a hub;

a number of HF electromagnetic energy filters in a spoked relationship with the hub and positional between the HF electromagnetic energy source and the subject, the number of HF electromagnetic energy filters including at least a first filter and a second filter wherein the first filter is positioned between the HF electromagnetic energy source and the subject by rotation of the hub when the HF electromagnetic energy source is energized to the first energy state and the second filter is positioned between the HF electromagnetic energy source and the subject by rotation of the hub when the HF electromagnetic energy source is energized to the second energy state; and

wherein only one of the first filter and the second filter is positioned between the HF electromagnetic energy source and the subject when the HF electromagnetic energy source is energized to either one of the first energy state or the second energy state.

2. (Original) The CT system of claim 1 wherein the HF electromagnetic energy source and the number of HF electromagnetic energy filters are rotatable about the subject.

3. (Original) The CT system of claim 1 further comprising:

a set of HF electromagnetic energy detectors configured to generate a set of electrical signals indicative of HF electromagnetic energy attenuated by the subject;

a DAS configured to receive the set of electrical signals; and

an image reconstructor connected to the DAS and configured to reconstruct an image of the subject from the electrical signals received by the DAS.

4. (Original) The CT system of claim 1 further comprising a movable table configured to position the subject within the opening.

5. (Original) The CT system of claim 4 incorporated into a medical imaging device and wherein the subject is a medical patient.

6. (Original) The CT system of claim 4 wherein the movable table is configured to convey articles through the opening wherein the articles include pieces of luggage/baggage and packages.

7. (Original) The CT system of claim 6 incorporated into at least one of an airport inspection apparatus and a postal inspection apparatus.

8. (Previously Presented) A controller configured to acquire CT imaging data at more than one chromatic energy state, the controller having instructions to:

energize an HF electromagnetic energy source configured to project an HF electromagnetic energy beam toward a subject to be scanned to a first voltage potential;

position only a first portion of a filtering apparatus between the subject and the HF electromagnetic energy source along a path of rotation of a hub of the filtering apparatus in a spoked relationship with the first portion during energization of the HF electromagnetic energy source to the first voltage potential;

energize the HF electromagnetic energy source to a second voltage potential; and

position only a second portion of the filtering apparatus between the subject and the HF electromagnetic energy source along the path of rotation of the hub in a spoked relationship with the second portion during energization of the HF electromagnetic energy source to the second voltage potential.

9. (Previously Presented) The controller of claim 8 having further instructions to:

energize the HF electromagnetic energy source to the first voltage potential such that a burst of HF electromagnetic energy is projected toward the subject and simultaneously therewith rotate the first portion by the hub between the subject and the HF electromagnetic energy source; and

energize the HF electromagnetic energy source to the second voltage potential such that a burst of HF electromagnetic energy is projected toward the subject and simultaneously therewith rotate the second portion by the hub between the subject and the HF electromagnetic energy source.

10. (Previously Presented) The controller of claim 8 wherein the filtering apparatus includes a single filter and wherein the first portion has a filtering power different than that of the second portion.

11. (Previously Presented) The controller of claim 8 wherein the filtering apparatus includes a first filter and a second filter in a spoked relationship with the hub and wherein the first filter comprises the first portion and the second portion and the second portion comprises a first portion and a second portion, the controller having further instructions to:

position the first portion of the first filter between the subject and the HF electromagnetic energy source along the path of rotation during energization of the HF electromagnetic energy source to the first voltage potential;

position the second portion of the first filter between the subject and the HF electromagnetic energy source along the path of rotation during energization of the HF electromagnetic energy source to the second voltage potential;

position the first portion of the second filter between the subject and the HF electromagnetic energy source along the path of rotation during energization of the HF electromagnetic energy source to a third voltage potential; and

position the second portion of the second filter between the subject and the HF electromagnetic energy source along the path of rotation during energization of the HF electromagnetic energy source to a fourth voltage potential.

12. (Previously Presented) The controller of claim 11 having further instructions to:

position the first filter between the subject and a portion of the HF electromagnetic energy source along the path of rotation during energization of the HF electromagnetic energy source to the first voltage potential and the second voltage potential; and

position the second filter between the subject and a portion of the HF electromagnetic energy source along another path of rotation during energization of the HF electromagnetic energy source to the third voltage potential and the fourth voltage potential.

13. (Original) The controller of claim 9 incorporated into a medical imaging apparatus configured to acquire medical diagnostic data of a medical patient.

14. (Original) The controller of claim 9 incorporated into a non-invasive parcel inspection apparatus configured to non-invasively determine contents within a parcel.

15. (Original) The controller of claim 14 wherein the non-invasive parcel inspection apparatus incorporated into at least one of a postal inspection system and an airport baggage inspection system.

16. (Previously Presented) A method of acquiring imaging data at more than one chromatic energy comprising the steps of:

projecting a first beam of electromagnetic energy along a single projection path toward a subject to be scanned;

positioning a first filter in the single projection path during projection of the first beam by rotation of a hub in a spoked relationship with the first filter;

projecting a second beam of electromagnetic energy along the single projection path toward the subject; and

positioning a second filter in the single projection path during projection of the second beam by rotation of the hub in a spoked relationship with the second filter.

17. (Previously Presented) The method of claim 16 further comprising the steps of:

energizing an HF electromagnetic energy source to a first voltage to generate the first beam of electromagnetic energy;

rotating the hub to position the first filter along a path of rotation such that the first filter is in the projection path during energization of the HF electromagnetic energy source to the first voltage;

energizing the HF electromagnetic source to a second voltage to generate the second beam of electromagnetic energy; and

rotating the hub to position the second filter along the path of rotation such that the second filter is in the projection path during energization of the HF electromagnetic energy source to the second voltage.

18. (Original) The method of claim 16 further comprising the step of acquiring imaging data with a first HF electromagnetic energy beam having a signal strength substantially equal to a signal strength of a second HF electromagnetic energy beam.

19. (Previously Presented) A computer readable storage medium having a computer program stored thereon and representing a set of instructions that when executed by a computer causes the computer to:

energize an HF electromagnetic energy source to a first voltage to cause the HF electromagnetic energy source to project a first beam of electromagnetic energy toward a subject to be scanned;

rotate a hub to position a first filter, in a spoked relationship with the hub, between the HF electromagnetic energy source and the subject during energization of the HF electromagnetic energy source to the first voltage;

energize the HF electromagnetic energy source to a second voltage to cause the HF electromagnetic energy source to project a second beam of electromagnetic energy toward the subject; and

rotate the hub to remove the first filter from being positioned between the HF electromagnetic energy source and the subject and position a second filter, in a spoked relationship with the hub, between the HF electromagnetic energy source and the subject during energization of the HF electromagnetic energy source to the second voltage.

20. (Original) The computer readable storage medium of claim 19 wherein the set of instructions further causes the computer to rotate the first filter and the second filter about the subject along a common path of rotation.

21. (Original) The computer readable storage medium of claim 19 wherein the set of instructions further causes the computer to rotate the first filter about the subject along a first path of rotation and rotate the second filter about the subject along a second path of rotation.

22. (Original) The computer readable storage medium of claim 19 incorporated into a medical imaging apparatus configured to acquire diagnostic imaging data of a medical patient.

23. (Original) The computer readable storage medium of claim 19 incorporated into a non-invasive parcel inspection apparatus including at least one of a postal inspection apparatus and a baggage inspection apparatus.

24. (Previously Presented) A filtering apparatus for a radiation emitting imaging system, the filtering apparatus comprising:

a hub having a generally circular cross-section and having a number of connection ports;

a first filter connected to the hub at a first connection port, the first filter having a first filtering power; and

a second filter connected to the hub at a second connection port, the second filter having a second filtering power;

wherein the first and second filters are in a spoked relationship with the hub.

25. (Original) The filtering apparatus of claim 24 wherein the first connection port is positioned 90° along the hub from the second connection port.

26. (Original) The filtering apparatus of claim 24 wherein the hub is configured to rotate the first filter into a path of HF electromagnetic energy when an HF electromagnetic energy source is energized to a first voltage and rotate the second filter into the path of HF energy when the HF electromagnetic energy projection source is energized to a second voltage.

27. (Previously Presented) The filtering apparatus of claim 24 wherein the hub is cylindrical or spherical, the filtering apparatus further comprising a third filter connected to the hub at a third connection port and a fourth filter connected to the hub at a fourth connection port, the first, the second, the third and the fourth filters having differing filtering powers and the third connection port being positioned 90° along the hub from the fourth connection port;

wherein the first, the second, the third, and the fourth filters are snap-fit, bolted, or integrated as a single integral body in the spoked relationship with the hub.

EVIDENCE APPENDIX:

-- None --

RELATED PROCEEDINGS APPENDIX:

-- None --